

ELUDOCORIS, A NEW GENUS OF PENTATOMIDAE
(INSECTA: HETEROPTERA) FROM COSTA RICA

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ABSTRACT

A new genus and species, *Eludocoris grandis*, is described from five specimens with a provenance of Guanacaste, Costa Rica, Central America. The new genus belongs in the nominate tribe and subfamily of the Pentatomidae. It may be related to one of the genera near *Loxa* Amyot and Serville and allies such as *Fecelia* Stål.

INTRODUCTION

In the course of examining the pentatomid material in the collection of the Instituto Nacional de Biodiversidad (INBio), Heredia, Costa Rica, I discovered a series of specimens from Guanacaste Province representing an undescribed genus and species. The genus is assignable to the subfamily Pentatominae, tribe Pentatomini (*sensu* Rolston and McDonald, 1979), and is notable for its large size and prominent markings. It is also remarkable that such a large and distinctly marked insect could have eluded the attention of specialists and collectors for so long. The genus appears to be related to a group of genera allied to *Loxa* Amyot and Serville, which is characterized by a spinous femoral apex. The produced, bidentate form of the humeri is reminiscent of a Haitian species of *Fecelia* Stål.

Eludocoris, new genus
(Fig. 1-3)

Type species.—*Eludocoris grandis*, n. sp.

Diagnosis.—Large, length 21 mm, with produced, bidentate humeri (Fig. 1). Metasternum flat, not elevated; mesosternum with low obtuse carina on midline. Metathoracic scent gland opening with an elongate, sinuate ruga extending $\frac{7}{8}$ distance to metapleural margin. Base of abdominal venter unarmed. Tylus and juga subequal in length. Rostrum attaining base of abdomen. Apex of femur terminating in acute spine, anteapical surface unarmed. Anterolateral pronotal margin dentate. Tarsi 3-segmented. Pair of trichobothria on each side of abdominal sternites III-VII posterior to and in line with spiracles.

Etymology.—The genus name relates to this bug's having escaped the attention of collectors for so long; *eludo* (Latin) = escape, avoid or elude; *coris* (Latinized from Greek *koris*) = bug.

Eludocoris grandis, new species
(Fig. 1-3)

Description.—Large, ovate, length 21 mm, width across humeri 16 mm. Yellowish-green with black markings on head, pronotum, scutellum and connexivum.

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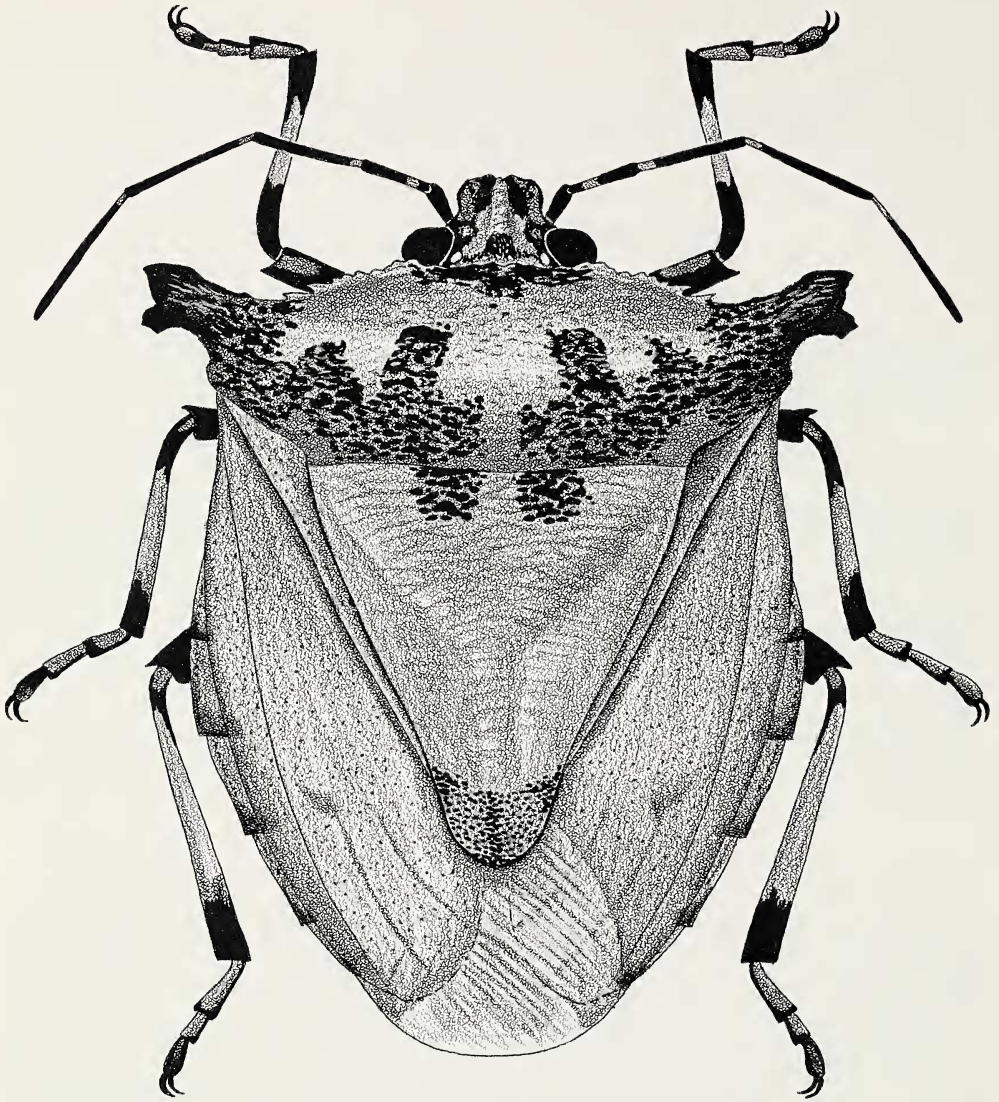


Fig. 1.—*Eludocoris grandis* Thomas, n. gen., n. sp.

Head. Eyes subpedunculate. Anteoangular angle rounded; outer jugal margins parallel almost to apex, apices subrectangular, slightly surpassing tylus. Ocelli large, width of each about one-fourth interocellar distance. Dorsum of head yellow-green with a black, squarish spot at middle of vertex; irregular black mark at inner margin of each eye extending basad and to surround ocellus, at apex of juga and at base of inner margin of tylus. Bucculae prominent, posteriorly arcuately truncate. Rostrum attains base of abdomen. First antennal segment slightly surpasses apex of juga; segments black with a short, dorsal, yellow stripe basally.

Thorax. Humeri and base of pronotum black with four blotches encroaching on disc. Black spot present at cervical margin on each side of middle. Anterolateral margin strongly, irregularly dentate. Humeri strongly produced, anterior margin

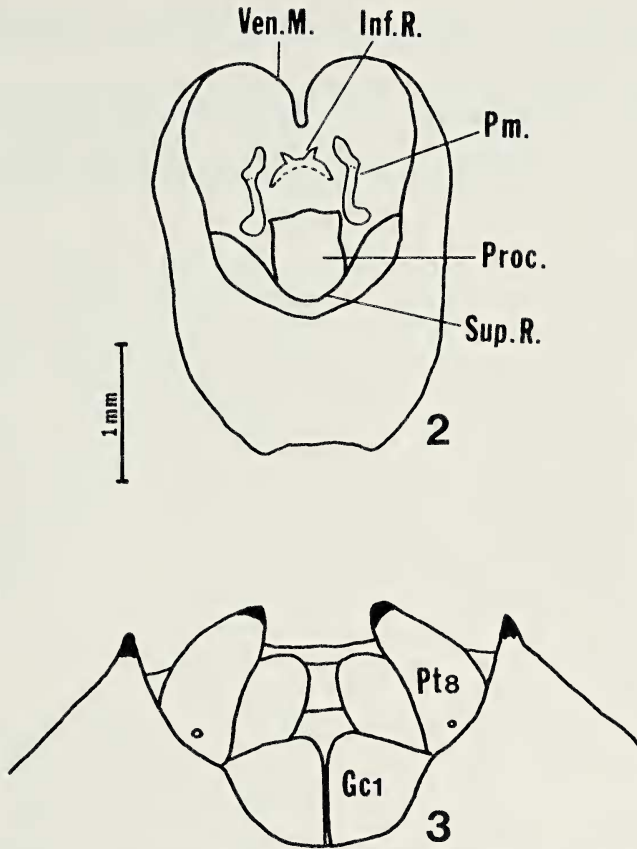


Fig. 2-3.—*Eludocoris grandis* genitalia. 2. Male genital capsule: Ven.M., ventral margin; Inf.R., inferior ridge; Pm, paramere; Proc., proctiger; Sup.R., superior ridge. 3. Female terminalia: Gc1, first gonocoxite; Pt8, eighth paratergite.

carinate, curving anterolaterally and terminating acutely; posterior margin bearing large subapical tubercle. Scutellum yellow-green with a cordate black spot at apex. Hemelytral corium immaculate yellow-green, produced apically beyond lateral conjunction with membrane, apex broadly obtuse; membrane clear, transparent. Femora yellow with black subapical annulus. Tibiae yellow medially, black basally and apically.

Abdomen. Venter yellow; spiracles large, located far from margin. Connexivum yellow with a black stripe on posterior margin of each laterotergite, apices with black spots.

Genitalia. Male: Ventral rim of pygophore biarcuate with a deep, narrow, mesial emargination (Fig. 2); superior ridge carinate, simple; inferior ridge ental, separated from ventral rim and bearing a pair of acute teeth. Paramere small with slender stem, bent and feebly expanded apically. Female: gonocoxites simple; eighth paratergites produced posteriorly and black-tipped; spiracles present (Fig. 3).

Type specimens.—Holotype, male. Verbatim label data: "Estac. Pitilla 700 m 9 Km S. Santa Cecilia, Guanac. Pr. COSTA RICA Set 1989, C. Moraga & P. Rios UTM 330300, 380200." Deposited INBio, Heredia, Costa Rica.

Allotype female, same label data, deposited Carnegie Museum of Natural History, Pittsburgh, Pennsylvania.

Paratypes. Male, same label data, deposited personal collection of author. Male and female: Costa Rica, Guanacaste Prov., Estación Cacao, SW side Volcán Cacao, 1000–1400 m (UTM 323300, 375700). Deposited INBio, Heredia, Costa Rica.

Etymology. — The specific epithet denotes the large size, *grandis* (Latin) = large.

DISCUSSION

The lack of a metasternal production or abdominal spine places *Eludocoris* in section 1 of the Neotropical Pentatomini (Rolston et al., 1980). In the key to the forty genera in this section of the Pentatomini, which excludes South American genera (Rolston and McDonald, 1984), *Eludocoris* falls out with *Loxa* and allies which have a spinous femoral apex. Among these genera it will key to *Chloropepla* Stål, from which it differs by having bidentate humeri and the tylus and juga subequal in length (Grazia, 1980). Rolston (1987) provided diagnoses and a key for the South American genera of section 1 which have, like this new genus, an elongate scent gland ruga. *Eludocoris* will key to couplet 6 of this key with *Thyanta* Stål and *Cyptocephala* Berg, genera in which the femora do not have spinous apices. Thus, *Eludocoris* bears no resemblance to any known South American genus. The recently described genus *Menudo* Thomas (1990) from Puerto Rico belongs in section 1 and also has spinous femoral apices. *Menudo*, however, is small (<10 mm), with simple humeri and several apomorphic characters, such as united bucculae, which preclude a close relationship.

Eludocoris may be related to the genera allied to *Loxa*: *Chloropepla*, *Chlorocoris* Spinola, and *Fecelia* Stål. These genera resemble one another in their large size, elongate depressed form, and green or greenish coloration. They also have an apical femoral spine, a character which separates them from all other pentatomine genera except *Menudo* and *Eludocoris*. An exceptional species in the genus *Fecelia* is *F. biorbis* Eger from Haiti, which, like *Eludocoris grandis*, is robust and has elaborately produced humeri and a brownish, ornate coloration (Eger, 1980). Species of *Fecelia*, however, have short scent-gland rugae, acute jugal apices, evanescent bucculae, and a shallow sulcus on the abdominal midline (Grazia, 1980). Therefore, the resemblance is mostly superficial. A more rigorous analysis of relationships must await a study of character distributions in the pentatomine genera.

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